

CHAPTER 4

PROGRAMS AND AGENCIES WITH WATERSHED MANAGEMENT RELATED PROJECTS: OPPORTUNITIES FOR COORDINATION AND COLLABORATION

The NPS program must collaborate closely with all agencies and organizations involved in the protection and restoration of watershed health and water quality in Montana. This chapter briefly describes the activities of state and federal agencies which contribute to the stewardship of watershed health and water quality in Montana and lend themselves to a watershed approach. One of the EPA requirements of the NPS Management Plan is to describe how the program will work with other agencies and programs to achieve water quality objectives. To address this requirement each brief overview of agency and program activities is followed by a list of coordination and collaboration opportunities that the NPS program will pursue within the watershed framework. These are both long and short term goals of the NPS program. The listing of an opportunity does not imply a commitment or requirement on the part of the associated agency or program. The purpose of the list is to develop a dialog and awareness of the opportunities that could lead to voluntary coordination or collaboration between the NPS program and those that are listed in this section. The agency and program coordination and collaboration opportunities also apply to local groups managing resources and water quality on a watershed basis. Collaboration opportunities include unique information the program can contribute to watershed assessments, funding sources, technical assistance, and any other contribution that can be incorporated into the watershed framework. Table 4-1 at the end of the chapter summarizes agency programs as they relate to sources of nonpoint pollution.

DEQ creates working partnerships with local agencies and organizations. Conservation districts, water quality districts, land trusts and environmental and conservation groups are aware of regional problems and are often in the best position to educate citizens and implement water quality protection and restoration projects.

This chapter provides comprehensive information about the data, expertise, and funding available to aid local agencies and groups with their planning and implementation of projects. Additionally, DEQ hopes this chapter will guide its efforts to coordinate and collaborate with other state and federal agencies whenever and wherever feasible in order to leverage resources and minimize duplication of effort. It is anticipated that the Montana Watershed Coordination Council be the vehicle for exploring and implementing these opportunities.

The Montana Watershed Coordination Council provides a forum where state and federal agencies can better coordinate their efforts. In addition, the MWCC gives local watershed groups the opportunity to more effectively communicate their needs with agencies whose mission are to enhance, conserve, and protect natural resources and sustain the high quality of life in Montana for present and future generations. The MWCC already serves as a statewide coordination network for Montana's natural resource agencies and private organizations to share resources, identify and capitalize on opportunities for collaboration, and to help avoid duplication of effort. The Council fosters coordination, communication, and cooperation. The council does not set policy or attempt to usurp any organization's authority or responsibility. The MWCC encourages local people to take a proactive, collaborative approach (e.g.

Coordinated Resource Management Planning) that will address natural resource issues and concerns.

There are several organizations not addressed in this section that provide valuable assistance to watershed planning and management in Montana. A few of these organizations include Montana's Wetlands Council, Montana Riparian and Wetlands Association and Montana Watercourse. These organizations are also key sources of information and avenues for collaboration among agencies and groups and provide training for skills necessary to watershed management (e.g. monitoring). Since this document is not all-inclusive, DEQ welcomes any information on other organizations that have similar missions and that promote coordination. The information will be used immediately and incorporated into this plan in future revisions.

4.1 STATE AGENCIES

4.1.1 Department of Environmental Quality

The Department of Environmental Quality's (DEQ's) mission is to protect, sustain, and improve a clean and healthful environment to benefit present and future generations. DEQ



is organized into five divisions: Centralized Services; Planning, Prevention & Assistance; Enforcement; Remediation; and Permitting & Compliance. Many activities and programs within these divisions contribute either directly or indirectly to the management of nonpoint source impacts on water quality. Identifying those activities and programs by watershed areas would enable the divisions to coordinate and collaborate to make more effective improvements in water quality and to make more efficient use of limited funding and staff availability. Some of these programs and activities include:

Permitting and Compliance Division

The Permitting and Compliance Division reviews and assesses nearly all environmental permit and license applications. The division prepares environmental review documents to comply with the Montana Environmental Policy Act (MEPA). The division also conducts facility inspections and reviews reports to determine compliance with permit conditions, laws and regulations. Activities within the division which affect nonpoint sources and water quality include the following:

Air and Waste Management Bureau: The Air and Waste Management Bureau addresses the deposition of air pollutants onto water bodies through its permitting and inspection activities. Opportunities to provide short-term collaboration and coordination with the NPS program include the following:

- Participation in Watershed Management Team meetings on as-needed basis.
- Participation on DEQ TMDL work teams where bureau activities are related to water quality restoration and protection.
- Identify potential contaminant sources within watersheds to incorporate into water quality restoration plans and source water assessments. This information includes the identification of ground and surface waters impacted by section-regulated facilities such as permits for hazardous waste sources and facilities where atmospheric deposition may be contributing to water quality degradation.
- For TMDL development: provide monitoring data from regulated facilities; identification of remediation and/or control activities planned or being implemented at regulated facilities; identification of public participation requirements, opportunities and content; and identification of existing or newly identified organized public groups.

Issues requiring long-term strategies to resolve:

None currently identified.

Environmental Management Bureau: The Environmental Management Bureau (EMB) regulates activities governed by the Montana Metal Mine Reclamation Act and the Major Facility Siting Act (MFSA). The EMB coordinates the permitting process for proposed "hard rock" mines and quarries, issues permits when appropriate, inspects permitted mining operations and ensures that disturbed areas are properly reclaimed after mining ends. It also performs environmental reviews for large powerlines and pipelines proposed under the MFSA. Collaboration and coordination opportunities with the NPS program include the following:

Mining and facility siting activities, i.e. construction, can have water quality impacts which will need to be incorporated into TMDL calculations. The EMB collects a great quantity of information that is relevant to water quality restoration planning. EMB staff will participate on Watershed Management Team (WMT) and, when appropriate, on the 16-basin TMDL work teams.

Issues requiring long-term strategies to resolve:

Sharing and incorporating information. For example, the TMDL/water quality restoration plan and/or planning process should be addressed in environmental impact statements for hard rock mines and major facility siting.

Industrial & Energy Minerals Bureau: The Industrial & Energy Minerals Bureau is responsible for permitting and regulating all mining and reclamation activities that are related to the prospecting and extraction of coal, uranium, sand, gravel, bentonite, scoria, phosphate and clay. These activities include completing regular inspections of active and inactive permitted mines and ensuring that stormwater permits are obtained for each mine. Collaboration and coordination opportunities with the NPS program:

- Incorporate information collected in permitting process into EnviroNet watershed database. This would include monitoring, groundwater, wildlife and cultural resource information.
- Share information collected for MEPA analysis and TMDL development (e.g. new permits and amendments require cumulative hydrologic impact analysis which is frequently a key element in TMDL development).
- Participation in Watershed Management Team meetings on as-needed basis.
- Participation on DEQ TMDL work teams where bureau activities are related to water quality restoration and protection.

Issues requiring long-term strategies to resolve:

None currently identified.

Community Services Bureau: The Community Services Bureau regulates non-hazardous solid waste management facilities and public drinking water supply or treatment facilities. The bureau assures that the environment is adequately protected from the hazards of waste disposal and that the public health is maintained through a safe and adequate supply of drinking water. These functions are achieved by technical reviews, licensing, certifications, compliance monitoring, training and technical assistance. Waste management facilities include municipal landfills, construction demolition waste landfills and septic tank land application sites. Collaboration and coordination opportunities with the NPS program:

- Contribute growth trend information to watershed planning process based on anticipated use patterns for wastewaters discharges and water supply.

- Help NPS program identify key areas of water quality concern for preservation (drinking water source) or for mitigation (wastewater inspections).
- Participation on Watershed Management Team and 16-basin TMDL work teams.

Issues requiring long-term strategies to resolve:

Incorporate public water supply monitoring report information into watershed planning and management databases.

Water Protection Bureau: The Water Protection Bureau prevents surface and groundwater pollution by reviewing potential sources of pollution and issuing Montana Pollutant Discharge Elimination System Permits. Collaboration and coordination opportunities with the NPS program:

- Improve coordination on high priority TMDLs where both point and nonpoint sources contribute to waterbody impairment.
- Serve on TMDL work teams and attend Watershed Management Team meetings.
- Coordinate discharger monitoring and baseline information to address information needs and gaps in the watershed planning database (i.e. EnviroNet).

Issues requiring long-term strategies to resolve:

- Integrate stormwater, groundwater, and CAFO permit activities into overall watershed planning framework.
- Increase modeling and assessment capabilities to support MPDES permit process and TMDL development.
- Coordinate the MPDES permits with other components of the watershed framework schedule, such as the monitoring, assessment and TMDL program.

Planning, Prevention & Assistance Division

The Planning, Prevention and Assistance Division develops integrated water, air, waste management and energy plans to protect Montana's environmental resources. The division is responsible for administering Montana's water quality laws and is delegated responsibility for Section 319 of the Federal Clean Water Act.

Monitoring & Data Management Bureau: Monitoring & Data Management Bureau activities include:

- Operation of statewide water quality monitoring networks and monitoring databases.
- Water quality assessment of lakes, streams, and wetlands and identification of impaired waters.
- Water quality modeling and watershed analysis.
- Dissemination of monitoring data.
- Technical assistance in development of water quality restoration plans and TMDLs.
- Training for monitoring and assessment protocols.
- Coordination of citizen volunteer water quality monitoring.
- Maintenance and calibration of monitoring equipment.

Collaboration and coordination opportunities with the NPS program:

- To continue to develop the CWA 305(b) report into an effective watershed assessment and management tool for DEQ programs. The report format has adopted the 8 digit HUC as the base reporting unit to support water quality decision making within the framework's watershed management units.
- To begin organizing monitoring data into a database format that is based on the 8 digit HUC watersheds.
- To develop strategic monitoring plans for watershed management units that address information gaps identified in the watershed profiles and from other sources including the WMT. The rotating monitoring schedule will maximize increased monitoring resources within watersheds on a regular basis (every five years).
- Assessment of water bodies lacking "sufficient credible data" (approximately 486). These waterbodies will be addressed on a watershed basis according to the TMDL schedule (see appendix D).
- Coordinate public 303(d) forums with watershed outreach events scheduled by other DEQ programs participating in the watershed framework.
- Increase the level of access and distribution of environmental monitoring information within DEQ to ensure that permit decisions are well informed by the latest status and trends information. The Blackfoot River is a good case study for how programs will be working together.
- Participate on, and in some cases lead, the 16-basin TMDL workteams.
- Participate on Watershed Management Team.

Issues requiring long-term strategies to resolve:

- Continue to increase the amount of environmental information that is collected by other agencies that is incorporated into the 305(b) report.
- Develop a form of the 305(b) report that can be used by local watershed organizations for watershed planning and management.

Pollution Prevention Bureau: The Pollution Prevention Bureau attempts to prevent water pollution before it occurs through the following activities:

- Delineates sources of water that supply public water supply wells and intakes and assesses potential risks to these source waters.
- Assists communities and public water suppliers to develop plans that protect the source waters.
- Wetland conservation.
- Assists local governments to establish local water quality districts.

Collaboration and coordination opportunities with the NPS program:

- Incorporate wetland conservation strategy into watershed framework for priority setting and grant award process.
- Include wetland identification and delineation information into the watershed domain within the Environet database.
- Coordinate public meeting and community outreach on a watershed basis (e.g. Wetlands, SWAP, 319, TMDL, waterbody classifications).

- Coordinate information collection and monitoring between Source Water Protection and other water quality programs including TMDLs.
- Use the watershed framework to better understand the relationship between ground water and surface water systems. Develop a data layer for each 8 digit HUC that identifies areas of interaction between surface water and ground water.
- Coordinate Source Water Protection and Wetland Conservation project priorities with the 319(h) grant program.

Issues requiring long-term strategies to resolve:

- Detailed GIS mapping of the status of wetlands within watersheds to support local watershed planning and management efforts.
- Coordinated participation of programs on local watershed planning and management organizations.

Resource Protection Planning Bureau: The Resource Protection Planning Bureau works with the Monitoring and Data Management Bureau to develop water quality restoration (TMDL) plans. The Resource Protection Planning Bureau is responsible for nonpoint source pollution prevention and the development of water quality standards. Collaboration and coordination opportunities include:

- The bureau's Watershed Management Section will take the lead in organizing and facilitating intra-agency efforts in watershed planning and water quality restoration and prevention activities related to NPS sources.
- Watershed coordinators will, in most cases, serve as team leaders of the 16 DEQ TMDL work teams.
- The Watershed Management Section provides NPS information and educational materials and opportunities to other local, state and federal agencies.
- Close collaboration between the water quality standards and watershed planning sections in TMDL development.
- Use the watershed framework to identify waters requiring site-specific water quality standards and to facilitate the development of site-specific standards. Use watershed forums to improve information and education to public regarding water quality standards.

Issues requiring long-term strategies to resolve:

- Completion of a statewide watershed planning and management information database for all 91 watershed planning areas.
- Creation of citizen advisory groups in each of the 91 watershed planning areas.
- Adequate financial support of watershed planning, monitoring and implementation activities.

Technical & Financial Assistance Bureau: The Technical & Financial Assistance Bureau provides low interest loan financing for drinking water and wastewater infrastructure projects and eligible nonpoint source pollution control and facilitates communication between DEQ and other state, federal, and local governments regarding environmental regulatory issues. Collaboration and coordination opportunities with the NPS program include the following:

- Promote awareness of State Revolving Fund (SRF) opportunities to address NPS pollution.

- SRF programs collaborate on monitoring and assessment to identify areas of water quality concern, and develop a shared priority ranking system for evaluating SRF projects with priorities from other agencies and programs.
- SRF programs work with the Resource Protection Planning Bureau to develop NPS applications of SRF funding.
- SRF loans used for implementation of BMPs in approved water quality restoration plans.
- Develop, demonstrate and publicize alternative energy systems for pumping irrigation water and providing off-stream livestock water.

Issues requiring long-term strategies to resolve:

- Participate in assessment activities to identify areas of impaired water quality for the purpose of proactively targeting the area for information and education activities regarding SRF opportunities.
- Integrate Intended Use Plan and Project Priority List with other statewide watershed reporting components.

Remediation Division

The Remediation Division strives to protect human health and the environment by preventing potential exposure to hazardous or deleterious substances that have been released to soil, sediment, surface water, or groundwater. Activities include:

- Investigation and cleanup of state and federal Superfund sites.
- Reclamation and remediation of abandoned mine lands.
- Implementation of corrective actions at sites with leaking underground storage tanks.
- Remediate groundwater contaminated by agricultural chemical spills, petroleum spills, or other improper placement of wastes.

Collaboration and coordination opportunities with the NPS program:

- Mine Waste Cleanup Bureau to share information from the statewide priority list for mine cleanup. Information includes estimates of volumes of stormwater runoff during construction phase that could be used for TMDL development.
- Possible opportunities for public notice and education for public meetings associated with the cleanup process.
- The RCRA facilities have monitoring requirements that include groundwater and other parameters that are considered appropriate for the location. The monitoring requirements and collected information (e.g. RCRIS, RCINFO, annual site reports) will be included in the watershed domain of the Environet database. Groundwater gradient and depth information could be useful in the Source Water Assessments.
- Facility corrective actions are assessment based and are logically connected to other mitigation activities that are being undertaken within the watershed management unit. The corrective actions could be considered in the context of an overall watershed recovery action strategy.
- Superfund has sites in many watersheds that are water supply watersheds and / or are listed on the 303(d) list of impaired waters. The Mine Waste Clean-up Bureau conducts risk assessments to identify potentially affected aquatic resources that could be useful to a watershed water quality planning and management process.

- Proposed drinking water sites and new growth/subdivision information could affect the Superfund priority list.
- Superfund program needs baseline information for their sites to determine what background conditions were prior to contamination, leading to better informed cleanup objectives.

Issues requiring long-term strategies to resolve:

None currently identified.

4.1.2 Department of Natural Resources and Conservation

The mission of the Montana Department of Natural Resources and Conservation (DNRC) is to help ensure that Montana's land and water resources provide benefits for present and future generations. Many of the programs and activities within DNRC affect management of water quality within Montana's watersheds.
<http://www.dnrc.state.mt.us/>



The **Conservation and Resource Development Division** assists individuals and local governments with natural resource management concerns and finances conservation, resource management, and technical activities. It also provides financial and technical assistance for watershed management and pollution prevention projects conducted by Montana's 58 conservation districts. This division is a strong supporter of conservation activities, water quality and upland and streamside management and protection. A strong partnership has developed between this division, conservation districts, USDA, NRCS, and watershed groups. Grant and loan programs include Conservation District Administrative Grants, Conservation District "HB223" Grants, Education Mini-Grants, Reclamation & Development Grants, Renewable Resource Grants, Renewable Resource Project Planning Grants, Riparian/Wetlands Educational Grant Program, Watershed Planning Assistance Emergency Grants and Loans, Renewable Resource Loans, Range Improvement Loans, Private Water Development Loans, Drinking Water State Revolving Fund Loans and Water Pollution Control State Revolving Fund Loans (the State Revolving Fund is a partnership between DNRC and DEQ).

The **Forestry Division**, headquartered in Missoula, is responsible for planning and implementing forestry programs through a network of field offices. The Forestry Division has two major functions: fire and aviation management and service forestry. The Service Forestry function provides services to various client groups to help them comply with State forestry laws and achieve their own forestry-related objectives. Services are delivered to individuals, local governments, corporations, other agencies, and the general public. Services include administering the BMP notification, hazard reduction, and stream side management laws; providing information on Forestry Best Management Practices; offering technical advice, education and cost-share assistance for private forest management; comprehensive management of Montana's community forest resources through programming, technical, and financial assistance; detecting and controlling insect and diseases; and producing forest plants for conservation plantings and reforestation.

The **Trust Land Management Division** administers and manages the state trust timber, surface, and mineral resources for the benefit of the common schools and the other endowed institutions in Montana. The division is divided into four bureaus: Agriculture and Grazing Management, Forest Management, Minerals Management, and Special Use Management. The department's obligation is to obtain the greatest benefit for the school trusts. The greatest monetary return must be weighed against the long-term productivity of the land to ensure continued future returns to the trusts.

Within the **Water Resources Division**, the Water Management, Water Rights, and Water Operations Bureaus provide expertise for surface water hydrology issues, floodplain

management, water allocation, and dam safety, assist with watershed planning, drought planning & management and collect water flow data. This division also supports eight regional offices that provide program support to citizens in local watersheds. Responsibility of state water plan development lies in with this division. The state water plan has been used to recognize and adopt local watershed plans as part of the state water plan.

With these programs opportunities exist for DNRC to coordinate and collaborate with local groups and organizations and other agencies within the watershed framework. These opportunities may include the following:

- Watershed planning.
- Water management, water allocation and drought planning.
- Floodplain delineation management and mitigation.
- Forest practices.
- Forestry BMP's and operations within Streamside Management Zones.
- Educational programs on land management, grazing, streamside management forestry, and water use.
- Collection of water quality, water resource and land use data from State owned school trust lands.
- Cooperative watershed assessment, planning and restoration activities in watersheds containing school trust lands intermixed with other agencies and landowners groups.

For additional information, contact:

Gary Frank, Hydrologist, Forest Management Bureau, Trust Lands Division, 406 542-4328

Chris Tootell, Bureau Chief, Service Forestry Bureau, Forestry Division, 406 542-4303

Steve Schmitz, Bureau Chief, Conservation District Bureau, CARRD, 406 444-6691

Richard Moy, Bureau Chief, Water Management, Water Resources Division, 406 444-6633

4.1.3 Department of Fish, Wildlife, and Parks

Montana's Department of Fish, Wildlife, and Parks (MFWP) manages the state's resources not only for recreational uses such as fishing and hunting but also for protection of open space, wilderness, and habitat for non-game species. The department achieves these goals by regulating fishing and hunting, managing wildlife management areas, and maintaining a network of state parks. The MFWP has many activities and programs that contribute to the stewardship of watershed health and water quality in Montana including:



The **Montana Rivers Information System** (MRIS) is a database containing information on fish species distribution, supporting distribution data (e.g. population trends, spawning survey results, and genetics data), and stream level information for over 4,500 streams and rivers (e.g. angling use, fisheries resource classification, protected designation, instream flow reservations, stream channel conditions).

The **Fisheries Division** provides technical assistance for managing endangered and threatened aquatic species, protecting and restoring aquatic habitat, protecting and restoring native fish populations, and controlling pollution. In order to provide this assistance, the staff of the Fishery Division:

- Monitors and researches fish populations and habitat condition.

- Participates in land use decisions with local, state, and federal agencies.
- Assists private landowners, agencies, and organizations with habitat protection and restoration efforts.
- Manages water flows in streams and water levels in lakes and reservoirs.
- Administers the Stream Protection Act (124 Permits) and, with the Conservation Districts, implements the Streambed Protection Act of 1975 (310 Permits).

The **Wildlife Division** administers the Montana Migratory Game Bird Stamp Program. This statewide program is funded by the sale of Montana Migratory Game Bird Stamps and associated art. At this time, about \$200,000 per year is available for wetland development projects. The emphasis is on wetland habitat projects that will increase waterfowl production and brood survival. Sites with adequate nesting cover near wetlands receive priority and typically, this includes large blocks of native or introduced grasses/legumes. Eligible practices include restoring drained wetlands, constructing new reservoirs, repairing breached dams or damaged spillways, installing water control structures, establishing suitable upland nesting cover, and working with landowners to implement managed grazing systems.

For additional information contact Tom Hinz, (406) 444-3248, thinz@state.mt.us.

MFWP has designated a pollution control biologist to facilitate interagency coordination regarding activities with implications to fishery resources. Examples of opportunities for the MFWP to collaborate and coordinate with other agencies, organizations, and individuals include the following:

- Collaborate with local watershed groups to accommodate watershed restoration goals that benefit water quality and fishery resources.
- In partnership with the Department of Environmental Quality, coordinate all water pollution activities including investigation of fish kills and other activities that have implications to fish resources and water quality.

For additional information, contact Glen Phillips (406) 444-5334.

4.1.4 Department of Agriculture

The Montana Department of Agriculture is charged with the mission to protect, enhance, and develop all agriculture in Montana; to encourage and promote production and marketing for agriculture and allied industries; and to provide protection for producers and consumers through administration and enforcement of statutes established by Montana's legislature. The Department is composed of three divisions: the Agricultural Development Division, the Agricultural Sciences Division, and the Central Management Division. While serving Montana's agriculture, the department strives to protect the health of the environment and the state's citizens. The Department of Agriculture has many activities and programs that contribute to the stewardship of watershed health and water quality in Montana including the following:

- Pesticide Management Program (Montana Pesticide Act, 80-8-101 et. seq., MCA): The proper use of pesticides is regulated by licensing pesticide applicators and dealers, registering pesticide products, certifying and training pesticide applicators and dealers, and enforcing pesticide laws and regulations.
- Pesticide users are informed about the protection of threatened or endangered species from the use of pesticides.
- Groundwater Management Program: Technical expertise and education is offered for protecting groundwater resources. These activities assess the presence of pesticides and fertilizers, track concentration and trends of pesticides and fertilizers

found in water resources and manage pesticides for the protection of water resources.

- Montana has designated several aquatic pesticides as restricted use requiring that individuals wishing to use these pesticides obtain an aquatic pesticide license and attend additional training.

Opportunities for collaboration and coordination with the Department of Agriculture include the following:

- Working with other agencies on cooperative water resource projects that include pesticide/fertilizer related sampling and monitoring including EPA, DEQ, MBMG, USGS, communities and local units of government.
- MDA also works cooperatively with private industry to conduct pesticide specific and/or site-specific sampling and monitoring to support pesticide registration/reregistration.
- MDA assists other agencies, units of government, communities, individuals and groups conducting or interested in conducting sampling and monitoring of water resources by providing technical assistance in sampling/monitoring design, well selection, analyte selection and laboratory analyses interpretation.

For additional information, please contact Donna Rise or Dan Sullivan at (406) 444-5400.

4.1.5 Department of Transportation

The mission of the Montana Department of Transportation (MDT) is to serve the public by establishing a transportation system that emphasizes safety, environmental preservation, cost effectiveness and quality. This work includes managing the state motor pool, maintaining highways, bridges and rest areas, planning for public transportation, rail systems, and airports, and administering highway traffic safety. The Department of Transportation has many activities and programs that contribute to the stewardship of watersheds and water quality in Montana including the following:



- Investigations for threatened, endangered species, and species of special concern along highway corridors.
- Wetland determinations, delineations, and mitigation projects.
- General wildlife and fisheries surveys.
- Processing of Section 404 Clean Water Act and Montana Stream Protection Act (SPA 124) permit applications.
- Groundwater monitoring and remediation as it pertains to Underground Storage Tanks (USTs) at MDT owned properties.
- Underground Storage Tanks.
- Implementation of construction BMPs.
- Establishment of wetland construction guidelines for the reclamation of borrow pits that have been adopted by the DEQ's Mine Waste Cleanup Bureau.
- Development of a functional assessment method for characterizing wetlands.

Opportunities for collaboration and coordination with MDT include the following:

- Since 1995, the MDT has created 27 wetland mitigation sites totaling approximately 400 acres. The MDT is required to coordinate with a variety of federal, tribal and state agencies to develop mitigation sites on both public and private lands for impacts associated with transportation projects. The majority of these projects are either restoration or creation efforts and involve everything from financial assistance, to planning, design and construction of the sites. The MDT has also participated in cooperative projects with a number of non-profit conservation organizations, tribal and federal agencies to jointly develop wetland and stream restoration projects.
- MDT provides research funds for environmental studies as they relate to transportation issues.
- Groups conducting watershed assessments may access MDT's data collected in the course of monitoring wetland mitigation projects concerning water quality, vegetational communities, and wildlife populations, as it pertains to specific mitigation sites and hydrologic data as it pertains to highway stream crossings.
- MDT may share technical expertise and experience with wetland restoration with interested groups and individuals.
- MDT will fund a position in DEQ's Resource Protection Planning Bureau to work on TMDL development related to transportation impacts. Water quality impairments caused by past transportation projects will be identified and addressed.

For further information, please contact Lawrence J. Urban, (406) 444-6224, lurban@state.mt.us.

4.1.6 Department of Justice

Through a 1998 partial settlement of its natural resource damage lawsuit, Montana v. ARCO, the State of Montana obtained approximately \$130 million for restoration or replacement of the injured natural resources and lost services in the Upper Clark Fork River Basin that were covered in the lawsuit. These injured natural resources include: 1) injured groundwater resources - the loss of over 600,000 acre-feet in the Butte, Anaconda, Rocker, and Milltown areas; 2) injured aquatic resources - the loss of the fishery in Silver Bow Creek and impairment of the fishery in the Clark Fork River to 1/5 of its baseline; and 3) injured terrestrial resources - the loss of 1000 acres of wildlife habitat and wildlife in riparian areas of Silver Bow Creek and the Clark Fork River, 3400 acres of riparian habitat in Opportunity ponds, and a loss of upland wildlife and wildlife habitat in the Anaconda uplands. Examples of lost services that were provided by these injured resources include hunting, fishing, observing wildlife, hiking, and bird watching.



In 2000, the Department of Justice Natural Resource Damage Program initiated an annual grant program using these settlement monies. The framework for the grant program is provided in the State's February 2000 *Upper Clark Fork River Basin Restoration Plan Procedures and Criteria*. Governmental entities, private individuals and private entities may apply for Restoration Fund Grants. Projects must be located in the Upper Clark Fork River Basin, from the headwaters near Butte downstream to and including the Milltown Reservoir just upstream of the City of Missoula. A limited exception exists for projects that would restore native trout that cannot from a practical and economic standpoint be restored in the Upper Clark Fork River Basin; those projects may be located in the Big Blackfoot River Basin. Three types of projects are eligible for grant funding:

- Restoration projects that will restore or replace the equivalent of injured natural resources and/or the services lost as result of releases of hazardous substances by ARCO or its predecessors that were the subject of the Montana v. ARCO lawsuit. Restoration actions operate directly on the injured resources and services to return

them to baseline conditions or to accelerate the recovery process. Replacement actions create or enhance resources and services equivalent or similar to those have been injured but are located away from the immediate site of injury.

- Planning projects that involve developing future grant proposals. Funding for project development grants is designed to promote the development of project proposals from entities with sound restoration ideas that do not have funds available to develop those ideas.
- Monitoring and Research projects that pertain to restoration of natural resources in the UCFRB.

Examples of possible eligible projects within the basin include:

- Removing tailings that cause surface water contamination and/or groundwater contamination.
- Treating contaminated groundwater.
- Reconstructing stream channels to create or enhance aquatic habitat.
- Using management techniques such as grazing and irrigation management in injured areas to create favorable conditions for recovery.
- Planting native trees and shrubs in riparian and upland areas to create or enhance wildlife habitat.
- Acquiring unimpaired riparian and upland wildlife habitat, such as acquisition of wetlands.
- Creating or enhancing recreational facilities such as trails and campgrounds.
- Constructing a reservoir to supply drinking water needs.
- Acquiring instream flows to improve surface water quality.

Applications received for Pilot Year 2000 funding include projects involving conservation easements and land acquisitions; revegetation/weed management; best management practices for wetland enhancement; watershed planning, modeling, and monitoring; research; and a recreational corridor development.

For more information on Upper Clark Fork River Basin Restoration Grants, see the Montana Department of Justice website (www.doj.state.mt.us) or contact Carol Fox at the Natural Resource Damage Program, 406-444-0205.

4.1.7 Montana Water Center

The Montana University System Water Center was established by an act of Congress in 1964. It is one of 54 centers known collectively as the National Institutes for Water Resources. The Center is located on the campus of Montana State University-Bozeman where the Director and a small staff coordinate programs. Associate Directors at the University of Montana --Missoula and --Butte campuses complete the Center's "*University System*" network. Ad hoc committees and multi-disciplinary teams are brought together for specific projects as needed. The mission of the center is to:



- Support and prioritize **water research** in Montana.
- Provide **training and education** for water professionals.

- Promote **problem-solving partnerships** among higher education, government, and the private sector to respond to water-related challenges and training needs.
- Serve as a **clearinghouse** for Montana water information.

Water Center programs include:

The **Small Systems Technical Assistance Center** provides technical, educational and training assistance to small public water systems.

The **Ecosystem Restoration Project**, a national website which focuses on reclamation and restoration of the nation's forests, decommissioned roads, wetlands, abandoned minelands, and other vital environments. This project is a collaboration of the Water Center and the U. S. Forest Service, the U.S. Environmental Protection Agency, the Montana Department of Environmental Quality, and the Bureau of Land Management.

The **Montana Water** website, a source for watershed and water quality information in Montana. The Montana Water website provides a directory of watershed groups as well as a directory of expertise in federal, state and local agencies and private organizations. The Montana Water Website provides information about the Montana Watershed Coordination Council. The site also posts articles on Montana water issues from other websites and publications.

The **Water Resources Research Program**. Under PL 101-397 each water center must promote research programs in cooperation with the colleges and universities within their state.

The **Whirling Disease Program** which includes a wild trout laboratory on the Bozeman campus, a research plan and a data base.

Opportunities for coordination and collaboration include:

- Continue to serve as a clearinghouse for watershed and water quality information.
- Provide training to watershed and conservation district leaders and staff.
- Help build working partnerships between citizens and nonprofit organizations and local, state and federal agencies.
- Assist in finding resources for water quality research.

4.1.8 Montana Volunteer Water Monitoring Project



The Montana Volunteer Water Monitoring Project employs a non-advocacy approach in teaching water quality and water monitoring procedures, focusing on providing citizens with tools and training so that they may make informed decisions regarding local water quality issues. Consequently, participants are encouraged to work in a positive manner and to build bridges within their communities whenever possible. The information gathered by participants in the Project is for educational purposes and to increase awareness and enhance stewardship of Montana's water resources. Additionally, it is a starting point for individuals to gather baseline information about their streams and rivers. Realizing that data collection is a byproduct of this project, participants have the option of sending their data via the Internet to a central repository at the Natural Resource Information System (NRIS) in Helena.

By becoming more knowledgeable about the complex world of water quality, a constituency of educated stewards becomes an essential component in the management and protection of Montana's water resources.

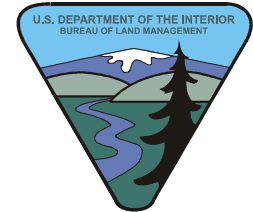
Opportunities for coordination and collaboration:

- Provide water monitoring training and information to local watershed groups developing TMDLs and water quality restoration plans.

4.2 FEDERAL AGENCIES

4.2.1 Bureau of Land Management

The Bureau of Land Management (BLM), an agency within the U.S. Department of the Interior, administers 264 million acres of America's public lands, located primarily in the 12 Western States. The BLM sustains the health, diversity, and productivity of the public lands for the use and enjoyment of present and future generations.



The BLM manages about eight million acres in Montana scattered throughout the state. BLM lands in Montana vary from open prairies in the east to rugged mountains in the west. These lands provide habitat for wildlife, forage for domestic livestock, riparian areas that help improve water quality in rivers and streams, and forest products ranging from Christmas trees to commercial timber. Much of the BLM land in Montana is relatively remote, providing vast areas in which people may enjoy solitude and recreation. Between 1994 and 1999, recreational visits to public lands increased by 143 percent. BLM administers the 149 mile Upper Missouri National Wild and Scenic River as well as twelve miles of the Blackfoot River Corridor.

The BLM manages the vast federal mineral estate in Montana. Prudent management of energy minerals—coal, oil and gas—is an important BLM program. There are significant oil and gas fields in the Williston Basin area in eastern Montana and in the general vicinity of Great Falls. Some of the nation's largest coal deposits lie beneath the prairies of eastern Montana and western North Dakota.

Abandoned mines pose a particular challenge to the BLM in Montana, where 19th-century mining spurred settlement by pioneers. Over the years, companies and prospectors have abandoned many early mining sites, leaving scars on the land that nature has been unable to heal. Many of these sites—generally referred to as Abandoned Mine Lands—continue to pollute water, as heavy metals and other by-products leach into streams flowing through valleys long since stripped of their bounty. Since 1997, BLM-Montana has taken part in a pilot project to clean up these sites. Using funds earmarked for this project, the BLM has developed a partnership with the Department of Environmental Quality and other federal agencies to clean up entire watersheds. Approaching these reclamation projects on a watershed basis is the most sensible way to deal with this problem, since pollution of this type affects the land and downstream water users. Doing the entire job at one time is also much more cost-effective and helps the BLM leverage available funding with its partners. Working cooperatively, BLM-Montana has been able to multiply its original funding fivefold, producing substantial on-the-ground results.

The three BLM Montana district offices in Miles City, Butte and Lewistown have adopted standards for rangeland health and guidelines for livestock grazing management. These standards address watershed functioning, water quality and wildlife habitat. The guidelines are best management practices, treatments, and techniques and implementation of range improvements that will help achieve the standards.

Coordination and collaboration opportunities include the following:

- Implementation of forestry and grazing BMPs.
- Evaluation of BMP effectiveness.
- Management of recreational areas and uses.

- Reclamation of abandoned mine lands.
- Management of transportation routes.
- Management of special plant and animal species.
- Management of mineral development.
- Management of wildlife habitat.
- Management of noxious weeds.
- Participation in the development of TMDLs and water quality restoration plans in watersheds where BLM is a significant resource manager.

For additional information, please contact Tim Bozorth (406) 896-5041.

4.2.2 U.S. Forest Service

The US Forest Service is a part of the U.S. Department of Agriculture. When the Forest Service began the lands were called Forest Reserves. Maintaining conditions of favorable flow from these lands was one of the primary objectives envisioned when the first Forest Reserves were established in the late 1800's. The name "forest reserve" gave way to "national forest" in 1905 and the lands were transferred from the Department of the Interior to the Department of Agriculture. Maintaining conditions of favorable flows remained one of the primary objectives of what grew into the present day National Forest System. Today there are over 150 National Forests in the United States with nine in Montana. All land management activities on these lands are the responsibility of the USDA Forest Service. The Forest Service uses a land management planning process with public involvement to determine the best use of all the resources. These include management of roads, fire, recreation, fish and wildlife habitat, timber, minerals, range, wilderness, heritage resources, and watersheds.



Watershed management remains a primary objective of the National Forest System. Activities include:

Watershed Restoration Planning and Implementation: The USDA Forest Service is responsible for prioritizing watersheds based upon needs, development of watershed restoration plans and implementation of those plans. The agency has become active with State Agencies, Soil and Water Conservation Districts and local watershed coordination groups to encourage proper treatment of entire watersheds. This effort needs to be continued and expanded to meet the increasing expectations of the American public and the legal mandates of the Clean Water Act.

Environmental Education: Environmental education programs are offered for local schools and other interested groups.

Abandoned Mine Reclamation: In coordination with the DEQ Abandoned Mines Program, the USDA Forest Service prepares joint engineering and cost analyses, conducts primary responsible party searches, plans and implements site remediation activities.

Road Management: The USDA Forest Service has undertaken an aggressive program of road inventory and problem identification. The Forest Planning process will develop overall transportation management direction.

Opportunities to coordinate and collaborate with the USFS include the following:

- Participating in TMDL development and water quality restoration planning and protection efforts in watersheds significantly impacted by Forest Service lands and activities.
- Providing technical and financial assistance with water quality and habitat protection and restoration projects.
- Sharing data collected in support of land and resource management plans such as hydrology and soils surveys and wetlands inventories.
- Incorporating measures into timber harvest plans that minimize impacts to water quality.
- Continued participation in and support of the Forestry BMP audit program.

For additional information, please contact Bruce Simms (406) 329-3447.

4.2.3 Fish and Wildlife Service

The U.S. Fish and Wildlife Service is part of the Department of the Interior. The Service is responsible for carrying out Federal laws and programs that conserve, protect, and enhance fish, wildlife, plants and their habitats. The Service's major responsibilities are for migratory birds, endangered species, some marine mammals, and freshwater and anadromous fish. The Service manages the National Wildlife Refuge System and operates National Fish Hatcheries. The Service also administers the Federal Aid in Sport Fish and Wildlife Programs, which distribute excise tax revenues from sales of hunting and fishing equipment and motorboat fuels to States for fish and wildlife restoration. Montana has seven staffed National Wildlife Refuges (NWRs) and five Wetland Management Districts (WMDs): Benton Lake NWR and WMD, Bowdoin NWR and WMD, Charles M. Russell NWR and WMD, Lee Metcalf NWR, Medicine Lake NWR and WMD, National Bison Range, Northwest Montana WMD, and Red Rock Lakes NWR.



The USFWS has many activities and programs that contribute to the stewardship of watersheds and water quality in Montana including the following:

North American Waterfowl Management Plan (NAWMP): NAWMP is an international effort to reverse waterfowl population declines in North America. Under this plan, U.S., Canadian, and Mexican partners agreed to pool their resources to conserve millions of acres of waterfowl habitat in specific joint venture areas deemed critical to waterfowl. The joint ventures have primarily tried to pursue non-regulatory strategies that can be implemented through voluntary and cooperative actions. All agencies, groups, or individuals having interests in wetlands, waterfowl, other wetland wildlife, soil and water conservation, and sustainable resource use are encouraged to join these partnerships. Two such ventures currently are in effect in Montana; the Prairie Pothole Joint Venture (PPJV) and the Intermountain West Joint Venture (IWJV). The PPJV in Montana has three project focus areas. These are Northeastern Montana (Sheridan, Daniels, and Roosevelt counties), Beaver Creek (Phillips, Valley, and Blaine counties), and Five Valleys (Flathead, Lake, Powell, Granite, and Missoula counties). The North American Wetland Conservation Act (NAWCA) is the principal funding source for the NAWMP. The Act created the North American Wetlands Conservation Fund designed to help support projects on public and private lands. A nine-member council is established to review annual project proposals submitted by partners for funding under the Act. Projects that fall within established Joint Ventures receive highest priority. For additional information, please contact James Stutzman, (406) 727-7400 x 24.

Partners for Fish and Wildlife Program: Partners for Fish and Wildlife is the U.S. Fish and Wildlife Service's private lands program. The program provides funding and technical assistance to private landowners interested in fish and wildlife habitat projects on their land. Projects are

evaluated from a biological and cost/benefit standpoint. The program is strictly voluntary. Initially, PFW focused exclusively on wetland habitat work, but since 1992 instream and riparian restoration, grazing management, native and prairie restoration, fish and wildlife - friendly irrigation systems, and a myriad of other projects are also eligible. Montana focus areas include the Blackfoot Valley, Rocky Mountain Front, Northeastern Montana, Beaver Creek, Mission Valley, and Centennial Valley. For additional information, please contact James Stutzman, (406) 727-7400 x 24.

Emergency Wetlands Resources Act: The purpose of the Emergency Wetland Resources Act of 1986 is to “promote the conservation of migratory waterfowl and to offset or prevent the serious loss of wetlands by the acquisition of wetlands and other essential habitat, and for other purposes”. Under the act, the U.S. Fish and Wildlife Service (FWS) has developed a National Wetlands Priority Conservation Plan (NWPCP) to identify the locations and types of wetlands that should be priorities for state and federal acquisition through the Land and Water Conservation Fund Act (LWCF). The NWPCP may result in acquisition of “priority” wetlands that provide a high degree of public benefit, are representative of rare or declining wetlands types within an ecoregion, and are subject to identifiable threat of loss or degradation. The functions and values of wetlands, as well as historical and potential wetland loss, are criteria for determining acquisition priorities. The Act requires that each state consider wetlands an important outdoor recreational resource in preparing the State Comprehensive Outdoor Recreation Plan (SCORP) required under the Land and Water Conservation Fund Act. The wetlands component of SCORP’s must be consistent with the national plan. FWS uses the state wetlands component of SCORP in preparing its regional Wetlands Concept Plans. For additional information, please contact Wetlands Coordinator, (303) 236-2985.

Fish and Wildlife Coordination Act: The Fish and Wildlife Coordination Act (FWCA) provides a key role for states in evaluating the impacts of water resources development projects (such as dam construction or reclamation projects) on fish and wildlife and Clean Water Act Sections 402 and 404 permits. The goals of the evaluation are to assess the status of affected fish and wildlife resources and to prevent or mitigate their loss and damage. The Act can be used to protect wetlands that are important to fish and wildlife conservation. However, the mitigation reports are only advisory to the lead federal agency, which is not required to follow their recommendations.

National Wetland Inventory: The National Wetland Inventory (NWI) program is responsible for identifying, classifying, mapping, and reporting on the status of wetlands of the United States. The primary objectives of the NWI program are to develop and distribute scientific information on the extent and characteristics of U.S. wetlands and produce wetland maps that accurately represent these resources. For additional information, please contact Chuck Elliot, (303) 236-7400 x 257.

The USFWS may coordinate and collaborate with other agencies, organizations, and individuals by providing data and financial or technical assistance to land owners and local agencies with habitat protection and restoration projects.

For additional information, please contact Rob Hazelwood (406) 449-5225.

4.2.4 Natural Resources Conservation Service



The Natural Resources Conservation Service is a Federal agency that works in partnership with the American people to conserve and sustain our natural resources on private lands.

The NRCS has many activities and programs that contribute to the stewardship of watersheds and water quality in Montana:

Small Watershed Protection Program: This program works through local government sponsors and helps participants solve natural resource and related economic problems on a watershed basis. Projects include floodplain protection, watershed protection, flood prevention, erosion and sediment control, water supply, water quality, fish and wildlife habitat enhancement, wetlands creation and restoration, and public recreation in watersheds of 250,000 or fewer acres. Technical and financial assistance is available for installation of works of improvement to protect, develop, and utilize the land and water resources in small watersheds.

Environmental Quality Incentives Program (EQIP): The Environmental Quality Incentives Program provides technical, financial, and educational assistance to farmers and ranchers who volunteer to address significant natural resource concerns. Half of the funds are targeted to livestock-related natural resource concerns and the other half to other natural resource priorities. Approximately 65% of EQIP funding is available for priority areas and 35% is available to natural resource concerns and objectives outside priority areas.

Farmland Protection Program (FPP): The Farmland Protection Program is a voluntary program that helps farmers keep their land in agriculture. The program provides funding to State, local, or tribal entities with existing farmland protection programs to purchase conservation easements or other interests. The goal of the program is to protect between 170,000 and 340,000 acres of farmland nationwide.

Resource Conservation and Development Program (RC&D): The Resource Conservation and Development Program was created to help local citizens address problems in their areas by bringing together leaders from local units of government with a variety of knowledge, expertise, and experience. Montana currently has seven RC&D areas: Beartooth RC&D, Northwest Regional RC&D, North Central RC&D, Headwaters RC&D, Bitterroot RC&D, Eastern Plains RC&D, and Central RC&D. The goal of RC&D is to encourage skilled, focused leadership which facilitates the coordination and wise use of all human and natural resources in Montana.

Forest Stewardship (FSP) and Stewardship Incentive Program (SIP): These programs are intended to provide technical and financial assistance to non-industrial private forest landowners who own 10 to 1000 acres (5000 acres with a waiver) of forest land, which they want to protect and enhance along with the associated wetlands and wildlife habitat. The FSP offers technical assistance to landowners for developing a Forest Stewardship Plan that addresses all natural resource concerns on the property. In Montana, the FSP provides landowners with a training workshop that gives them background to develop their own management plan if they wish. The Stewardship Incentive Program provides cost share assistance to landowners who choose to have the management plan developed by other resource professionals, including support for implementing practices specified in the plan.

Swampbuster/Wetland Conservation Provisions: Swampbuster discourages the conversion of wetlands on agricultural land by denying federal farm benefits to farmers who drain wetlands.

Wetland Reserve Program (WRP): The Wetlands Reserve Program is a voluntary program to restore and protect wetlands on private property. WRP provides landowners with financial incentives to restore wetlands. Landowners may sell a conservation easement or enter into a

cost-share restoration agreement. Landowners and the NRCS develop a plan for the restoration and maintenance of the wetland.

Wildlife Habitat Incentives Program (WHIP): The Wildlife Habitat Incentives Program is a voluntary program for people providing both technical assistance and cost sharing to help establish and improve fish and wildlife habitat. Participants work with USDA's Natural Resources Conservation Service to prepare a wildlife habitat development plan. The plan describes the landowner's goals for improving wildlife habitat and includes a list of practices and a schedule for installing them. It also details the steps necessary to maintain habitat for the life of the agreement.

Conservation Technical Assistance: Conservation Technical Assistance is the NRCS base program that provides range conservationists, soil conservationists, engineers, biologists, agronomists and soil scientists who work hand-in-hand with local land users to conserve natural resources on private lands. With NRCS technical assistance, landowners plan and apply practices that reduce soil erosion, improve water quality and enhance forest land, wetlands, grazing land and wildlife habitat.

Coordination and collaboration opportunities include the following:

- Funding for projects conducted by landowners, conservation districts, and watershed groups.
- Technical assistance for projects conducted by landowners, conservation districts, and watershed groups.

For additional information, please contact Dennis Loreth, (406) 587-6795, dloreth@mt.nrcs.usda.gov

4.2.5 Farm Services Agency



The Farm Service Agency (FSA) of the U.S. Department of Agriculture ensures the well-being of American agriculture, the environment and the American public through efficient and equitable administration of farm commodity programs; farm ownership, operating and emergency loans; conservation and environmental programs; emergency and disaster assistance; domestic and international food assistance and international export credit programs. These programs provide a safety net to help farmers produce an adequate food supply, maintain viable operations, compete for export sales of commodities in the world marketplace, and contribute to the year-round availability of a variety of low-cost, safe, and nutritious foods. FSA enhances the environment by the development and implementation of programs to ensure adequate protection of natural, cultural, and historic resources. For example, the Conservation Reserve Program is a voluntary program that offers annual rental payments and cost-share assistance to establish long-term resource-conserving covers on eligible land.

FSA programs and activities that contribute to the stewardship of watershed health and water quality include the following:

Conservation Reserve Program (CRP): CRP is a voluntary program that offers annual rental payments, incentive payments for certain activities, and cost-share assistance to establish approved cover on eligible cropland. The program encourages farmers to plant long-term resource-conserving covers to improve soil, water, and wildlife resources. Contract duration is between 10 and 15 years. Special environmental priority practices installed on cropland, such as, grassed waterways, shelterbelts, field windbreaks, living snow fences, contour grass strips, salt tolerant vegetation, shallow water areas for wildlife, and filter strips, are available. Eligible acreage adjacent and parallel to streams devoted to riparian buffers planted to trees may also be enrolled. CRP is administered through local county Farm Service Offices.

Emergency Conservation Program (ECP): ECP provides emergency funding for farmers and ranchers to rehabilitate farmland damaged by wind erosion, floods, hurricanes, or other natural disasters, and for carrying out emergency water conservation measures during periods of severe drought. The natural disaster must create new conservation problems. Conservation problems existing prior to the disaster are not eligible for cost-share assistance. Implementation of the program is subject to availability of funds, which are appropriated by Congress. County FSA committees set cost-share levels up to 64 percent. Eligibility for ECP assistance is determined by county FSA committees based on individual on-site inspections, taking into account the type and extent of damage. Emergency practices to rehabilitate farmland damaged by wind erosion and other disasters, including drought, may include debris removal, providing water for livestock, fence restoration, grading and shaping of farmland, restoring conservation structures, and water conservation measures.

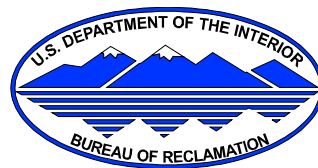
Opportunities for the FSA to coordinate and collaborate with other agencies, organizations, and individuals include the following:

- Providing financial assistance to farmers for conservation measures.
- Providing technical assistance (e.g. a landowner guide) for selecting and implementing appropriate conservation techniques and practices.

For additional information please contact Glen Patrick (406) 587-6880.

4.2.6 Bureau of Reclamation

The US Bureau of Reclamation (BOR) is a contemporary water management agency that helps the Western States, Native American Tribes and others meet new water needs and balance the multitude of competing uses of water in the West.



Reclamation strives to meet the increasing water demands of the West while protecting the environment and the public's investment in these structures. Reclamation achieves these goals by emphasizing water conservation, recycling and reuse as well as developing partnerships with customers, states, and Native American groups. For years Reclamation has been working with water user groups, other Federal, state and local agencies and interest groups to provide increased benefits from water resources in the Great Plains Region. Improved water management and conservation have been accomplished through several programs: Water Management Studies and Investigation of Existing Projects studies under the General Investigations Program. In addition, water conservation planning and technical assistance is being provided through the Water Management & Conservation and Reclamation Reform Act items under the Operations and Maintenance Programs. BOR manages 13 projects in Montana east of the Continental Divide. These include 11 dams and reservoirs, 9 diversion dams, 10 pumping plants and 2 power plants. The eastern Montana projects provide water to 352,915 acres of land which produced \$78.5 million worth of crops in 1990. Principal crops are sugar beets, hay, corn, wheat and barley. Reclamation also operates three major dams and manages three projects in Western Montana that provides irrigation water to over 23,000 acres.

The BOR has many activities and programs that contribute to the stewardship of watersheds and water quality in Montana including:

Wetland Development Program (Great Plains Region): The Wetland Development Program provides assistance in the form of grants or cooperative agreements to public or private organizations such as Conservation Districts, tribes, and private conservation groups for improvement of wildlife habitat associated with water systems or supplies affected by BOR projects. For additional information, please contact Tom Parks (406) 247-7295, tparks@gp.usbr.gov

AgriMet: AgriMet is a satellite-linked, weather and evapotranspiration (ET) reporting network. This network is used to assist irrigators in scheduling irrigation applications. Growers use the system's data along with field examinations to determine when and how much water is required for optimum crop growth.

Hydromet Data System: Hydromet is a network of automated hydrologic and meteorologic monitoring stations located throughout the Great Plains Region. The Hydromet network collects remote field data and transmits it via satellite to provide real-time water management capability. Other available information is integrated with Hydromet data to provide streamflow forecasting and current runoff conditions for river and reservoir operations.

Coordination and collaboration opportunities include the following:

- Funding for watershed projects.
- Technical assistance with irrigation issues.
- Participation in TMDL development and water quality restoration planning in watersheds where BOR activities have a significant impact.

4.2.7 Environmental Protection Agency

Region 8 of the U.S. Environmental Protection Agency (EPA) includes the six states of Colorado, Montana, North Dakota, South Dakota, Utah and



Wyoming; and 27 Tribal Nations. The Region 8 Water Programs are responsible for implementing programs to protect the public and the environment by preventing, reducing and regulating contamination of surface water and ground water.

The EPA has many activities and programs that contribute to the stewardship of watersheds and water quality in Montana including the following:

Nonpoint Source Management Grant Program: Under Clean Water Act Section 319(h), EPA is authorized to dispense federal grant funds to delegated state NPS programs such as Montana's program to conduct NPS efforts in the state. Cooperative agreements are made between EPA and the state, enabling federal funds to be distributed. The state NPS program dispenses a portion of these funds to sponsors of NPS projects to support these efforts. The state must match the federal contributions of 60% with a 40% match for the total award. States make applications for funding annually. Approximately \$3 million is available to Montana for 2001. More information can be obtained by contacting the DEQ Watershed Management Section 406-458-6771.

Wetland Protection Development Grants Program: Beginning in 1990 the EPA made grants available to Federally recognized tribes and state wetland agencies, state water quality agencies, and state agencies with wetland programs for development and/or enhancement of their wetlands protection programs. Grant funds can be used for both regulatory and non-regulatory wetland protection activities. EPA's Wetlands Program State/Tribal Grant Funds can be used for a variety of wetland protection activities including: developing state water quality standards for wetlands; improving Section 401 water quality certification programs to protect wetlands; developing state wetland regulatory programs; assisting with state Section 404 assumption efforts; developing statewide wetland strategies; training leading to development of state wetlands protection programs; and wetland protection demonstration and restoration projects. For additional information, please contact Steve Potts, EPA Region 8, (406) 441-1140 x 232, potts.stephen@epa.gov.

Region 8 of EPA provides financial assistance for pollution control and pollution elimination projects through the **Regional Geographic Initiative Program**, the **Five-Star Restoration Program**, and the **Community-based Environmental Protection Program**. All three programs disburse funding allocated for implementation of sections 104(b)(3) and 106 of the Clean Water Act. For additional information, please contact Carol Campbell, Director of Ecosystem Protection Section, Region 8, (303) 312-6340.

Coordination and collaboration opportunities include the following:

- Provide financial assistance for watershed and water quality projects.
- Provide technical assistance with water quality monitoring and modeling, source water and drinking water protection, and wetland management and protection activities.

For additional information, contact: EPA Region 8 (406) 441-1140.

4.2.8 US Geological Service



The U.S. Geological Service (USGS) is the Nation's largest water, earth, and biological science and civilian mapping agency. The USGS works in cooperation with over 2,000 organizations across the country to provide reliable impartial scientific information to resource managers, planners, and other customers. This information is gathered in every State by USGS scientists to minimize the loss of life and property from natural disasters; contribute to the sound conservation, as well as the economic and physical development of the Nation's natural resources; and enhance the quality of life by monitoring water, biological, energy, and mineral resources. There are USGS offices in West Glacier, Kalispell, Missoula, Helena, Fort Peck, Billings, and Bozeman.

Through its Cooperative Research Program USGS is conducting several activities and programs that contribute to the stewardship of watershed health and water quality in Montana including the following:

The USGS is working closely with the US Forest Service and the Bureau of Land Management to develop efficient and cost-effective methods to evaluate effects and to formulate plans for remediation of abandoned mine lands. A pilot study was initiated in 1997 in the Boulder River watershed in southwestern Montana.

USGS scientists in partnership with Montana State University, Montana Fish, Wildlife, and Parks, and the USFWS are conducting studies of the effects of whirling disease on brown trout in the Ruby River and Poindexter Slough and on rainbow trout in the Missouri River, which is yielding important information to help resource managers maintain fish populations.

Through the National Water Quality Assessment program, USGS is conducting two studies encompassing portions of Montana: The Northern Rockies Intermontane Basins study and the Yellowstone River Basin study.

USGS works closely with residents, local groups, and agencies to provide data for specific needs and concerns such as characterizing surface and ground water resources to determine potential effects of urban development and mineral and energy resource development.

In cooperation with the Montana Department of Transportation, USGS is conducting a hydrogeologic assessment of wetland sites and potential wetland restoration/ mitigation sites.

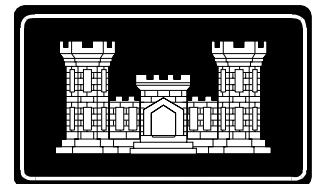
Opportunities to collaborate and coordinate include the following:

- Technical assistance with ground-water issues including the determination of sources of nitrates, estimation of ground-water age, and flow-system modeling.
- Technical assistance with surface-water issues including near real-time streamflow and water-temperature monitoring, flow statistics, and flood-plain delineation.
- Technical assistance with water-quality issues including geochemical modeling and monitoring surface water and ground water for major ions, trace elements, pesticides, stable and radioactive isotopes, and sediment.
- Cooperative funding of studies utilizing the technical expertise of the USGS.

For additional information, contact Joanna Thamke (406) 457-5923.

4.2.9 U.S. Army Corps of Engineers

The Department of the Army regulatory program initially served to protect and maintain the navigable capacity of the Nation's waters; however, Congress has expanded the US Army Corps' regulatory mission to include



protection of the nation's aquatic environment. The U.S. Army Corps of Engineers (ACE) administers permit programs for Section 10 of the Rivers and Harbors Act and Section 404 of the Federal Clean Water Act. Section 10 permits are required for activities such as construction of structures (e.g. piers, wharfs, breakwaters, bulkheads, jetties, weirs, and transmission lines), dredging or disposal of dredged material, or excavation, filling, or other modifications to the navigable waters of the United States. Section 404 permits are required for activities involving the disposal of dredged or fill material into the waters of the United States.

The ACE supports watershed and water quality projects in Montana by facilitating the permitting process. For example, organizations and individuals proposing work in streams, wetlands, and other water bodies may fill out a single application form, which is accepted by the ACE along with several local and state agencies. In addition, the proposed Nationwide Permit #27 will facilitate permitting for stream restoration and wetland creation projects.

Additional information about navigating the permitting process may be obtained by contacting a project manager at (406) 441-1375.